

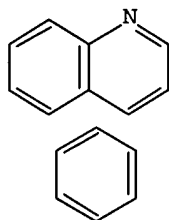
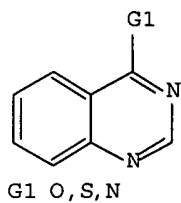
10/088,854

No internet access, on 1/20/04  
Search done by Bill Mercer

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L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

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L4 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:757679 CAPLUS Full-text

DOCUMENT NUMBER: 139:276825

TITLE: Preparation of 8-arylquinoline PDE4 inhibitors

INVENTOR(S): Gallant, Michel; Lacombe, Patrick; Dube, Daniel;  
Deschenes, Denis; MacDonald, Dwight; Dube, Laurence

PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.

SOURCE: PCT Int. Appl., 184 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

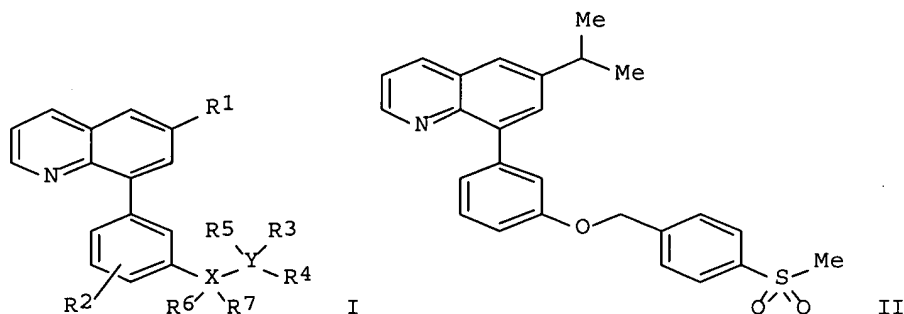
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003078397	A1	20030925	WO 2003-CA374	20030317
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2002-365088P P 20020318

OTHER SOURCE(S): MARPAT 139:276825

GI



AB Title compds. I [wherein R1 = H, halo, or (un)substituted alkanoyl, (cyclo)alkyl, alkenyl, alkoxy, (hetero)aryl, CN, heterocycloalkyl, carbamoyl, sulfamoyl, etc.; R2 = H, halo, OH, or (un)substituted alkyl or alkoxy; R3 = absent or H, CO2H, or (un)substituted (cycloalkyl)alkyl, alkanoyl, benzoyl, carbamoyl, etc.; R4 = (un)substituted Ph, pyrazolopyrimidinyl, benzothiazolyl,

quinazolinyl, or heteroaryl; R5 = absent or H; R6 = absent, H, or alkyl; R7 = absent or H; X = O, S, N, C, or CO; wherein when X = O, S, or CO, then R6 and R7 are absent and when X = N, then R7 is absent; Y = C, S, N, SO2, O, or CO; wherein when Y = S, SO2, O, or CO, then R3 and R5 are absent and when Y = N, then R5 is absent; and pharmaceutically acceptable salts thereof] were prepared as phosphodiesterase IV (PDE4) inhibitors. For example, 3-(6-isopropylquinolin-8-yl)phenol was coupled with 1-chloromethyl-4-methanesulfonylbenzene in acetone to give II. One hundred sixteen invention compds. suppressed PDE4 with IC50 values ranging from 80 µM to 0.029 µM in assays evaluating LPS- and FMLP-induced inhibition of tumor necrosis factor α (TNF-α) and leukotriene B4 (LTB4) in human whole blood. In a test measuring IgE-mediated allergic pulmonary inflammation induced by inhalation of antigen by sensitized guinea pigs, administration of I resulted in a significant reduction in the eosinophilia and the accumulation of other inflammatory leukocytes and effected less inflammatory lung damage. One hundred forty-one invention compds. also inhibited the hydrolysis of cAMP to AMP by human recombinant phosphodiesterase IVa with IC50 values ranging from 150 nM to 0.056 nM. Thus, I and their pharmaceutical compns. are useful for the treatment or prevention of a variety of allergic, inflammatory, CNS, and other conditions (no data).

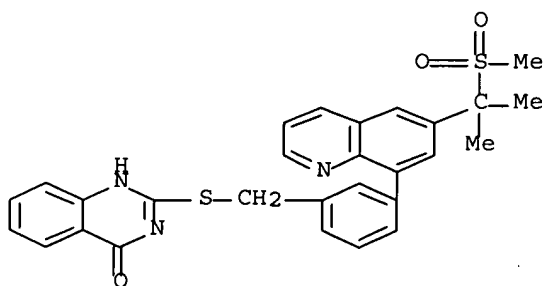
IT 605684-75-1P, 2-[[[3-[6-[1-(Methanesulfonyl)-1-methylethyl]quinolin-8-yl]benzyl]sulfanyl]-3H-quinazolin-4-one

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(PDE4 inhibitor; preparation of 8-arylquinoline PDE4 inhibitors for treatment of a variety of allergic, inflammatory, CNS, and other conditions)

RN 605684-75-1 CAPLUS

CN 4(1H)-Quinazolinone, 2-[[[3-[6-[1-methyl-1-(methylsulfonyl)ethyl]-8-quinolinyl]phenyl]methyl]thio]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:590835 CAPLUS [Full-text](#)

DOCUMENT NUMBER: 139:149651

TITLE: Preparation of 4-phenylaminoquinazoline derivatives as fructose 1,6-bisphosphatase inhibitors

INVENTOR(S): Bauer, Paul H.; Wright, Stephen W.; Schnur, Rodney C.

PATENT ASSIGNEE(S): USA

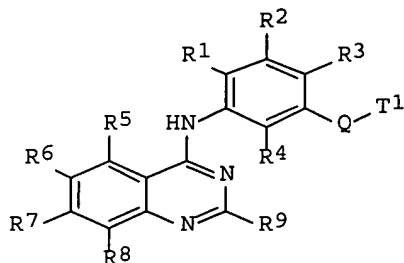
SOURCE: U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003144308	A1	20030731	US 2002-251073	20020920
PRIORITY APPLN. INFO.:			US 2001-324751P	P 20010924
OTHER SOURCE(S):			MARPAT 139:149651	

GI



I

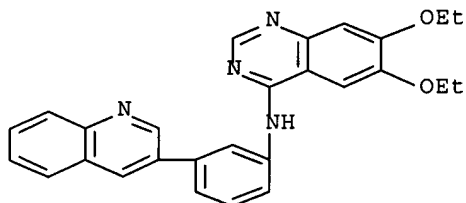
- AB The present invention relates to certain quinazoline compds. (I), prodrugs thereof, or pharmaceutically acceptable salts of said compds. or said prodrugs, [wherein Q = pyrrolyl, pyrazolyl, oxazolyl, thiazolyl, isoxazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, triazolyl, furyl, quinolyl, imidazolyl, pyridyl pyrimidyl; T1 = H, Me, Et, OR10, SR10, cyano, cyclopropyl, cyclobutyl, NH2, NHR10, N(R10)2, NHNH2, CHR10OH, CH2R10, COCH3, CON(R10)2; R1, R2, R3, R4 = H, halo, trifluoromethyl, C1-4 alkyl, C1-4 alkoxy; R5, R8 = H, F, Cl, HO, Me; R6, R7 = C1-4 alkyl, C1-4 alkoxy; R9 = H, cyclopropyl, cyclobutyl, C1-4 alkyl, (CH2)m-Y; R10 = H, Me, Et; m = 1, 2, 3, or 4; Y = F, Cl, Br, HO, N(R11)2, N-methylpiperazin-1-yl, thiazolidin-3-yl, thiomorpholin-4-yl, piperidin-1-yl, pyrrolidin-1-yl, morpholin-4-yl, imidazol-1-yl, C1-4 alkoxy, SR11, SOR11, SO2R11, CO2H, CO2(C1-C4)alkyl or CON(R11)2; R11 = H, C1-4 alkyl] which are fructose 1,6-bisphosphatase inhibitors (no data) and have utility in the treatment of diabetes mellitus, hypercholesterolemia, hyperlipidemia, diabetic complications, and cancer. The invention also relates to pharmaceutical compns. and kits comprising such quinazoline compds. I and to methods of using such compds. in the treatment of diabetes mellitus, hypercholesterolemia, hyperlipidemia, diabetic complications, and cancer. Thus, a solution of 0.157 g (0.62 mmol) of 4-chloro-6,7-diethoxyquinazoline in 2.5 mL of ethanol was heated at reflux, treated with 0.136 g (0.62 mmol) of 4-(3-aminophenyl)thiazole-2-carboxylic acid amide dissolved in 4 mL of ethanol added in a single portion, and heated at reflux for 30 min, after which the reaction mixture was allowed to cool and the precipitated product was filtered, washed with ethanol, and dried to afford 0.152 g (56 %) of 4-[3-(6,7-diethoxyquinazolin-4-ylamino)phenyl]thiazole-2-carboxylic acid amide hydrochloride.
- IT 570430-50-1P, (6,7-Diethoxyquinazolin-4-yl) (3-quinolin-3-ylphenyl)amine  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of phenylaminoquinazoline derivs. as fructose bisphosphatase

inhibitors for treatment of diabetes mellitus, hypercholesterolemia, hyperlipidemia, diabetic complications and cancer)

RN 570430-50-1 CAPLUS

CN 4-Quinazolinamine, 6,7-diethoxy-N-[3-(3-quinolinyl)phenyl]- (9CI) (CA

INDEX NAME)



L4 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:376830 CAPLUS Full-text

DOCUMENT NUMBER: 138:385441

TITLE: Preparation of quinazolines as antitumor agents

INVENTOR(S): Hennequin, Laurent Francois Andre; Kettle, Jason Grant; Pass, Martin; Bradbury, Robert Hugh

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited

SOURCE: PCT Int. Appl., 218 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003040108	A1	20030515	WO 2002-GB4931	20021031
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

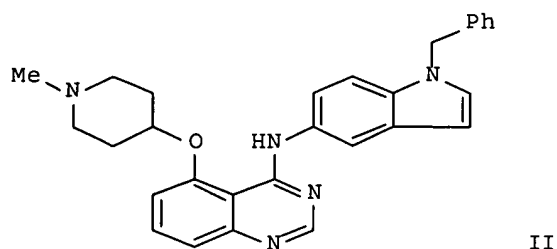
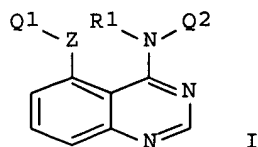
PRIORITY APPLN. INFO.: GB 2001-26433 A 20011103

GB 2001-29059 A 20011205

OTHER SOURCE(S): MARPAT 138:385441

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*Case*



AB Anilino-, indolylamino-, and benzopyrazolylamino-substituted quinazolines I [wherein R1, R2, R3, and R6 = independently H or alkyl; Z = a bond, O, S, or NR2; Q1 = (un)substituted cycloalkyl(alkyl), cycloalkyl(alkenyl), cycloalkyl(alkynyl), or heterocyclyl(alkyl); with the proviso that alkylene chains within Q1Z are optionally interrupted by O, S, SO, SO2, NR3, CO, CHOR3, CONR3, NR3CO, SO2NR3, NR3SO2, CH=CH, or C.tplbond.C; Q2 = (un)substituted C6H4-4-X2Q2, 1-(X3Q4)indol-5-yl, 1-(X3Q4)-indol-6-yl, 1-(X3Q4)-1H-benzopyrazol-5-yl, or 1-(X3Q4)-1H-benzopyrazol-6-yl; X2 = a bond, O, S, SO, SO2, NR6, CHOR6, CONR6, NR6CO, SO2NR6, NR6SO2, OC(R6)2, C(R6)2O, SC(R6)2, C(R6)2S, CO, C(R6)2NR6, or NR6C (R6)2; or X2Q3 = heterocyclylcarbonyl; X3 = a bond, SO2, CO, SO2NR7, or C(R7)2; Q3 and Q4 = independently (un)substituted (heteroaryl); and pharmaceutically acceptable salts thereof] were prepared for use in the prevention or treatment of tumors which are sensitive to inhibition of erbB receptor tyrosine kinases. For example, coupling of 4-hydroxy-1-methylpiperidine with 5-fluoro-3,4-dihydroquinazolin-4-one using NaH in DMA gave the ether (91%). Reaction with POCl3 and di-isopropylethylamine in DCM provided 4-chloro-5-(1-methylpiperidin-4-yloxy)quinazoline (62%), which was coupled with 5-amino-1-benzylindole in the presence of IPA containing HCl in ether to afford II·HCl (46%). The biol. activity of the example compds. was assessed in five assays. Thus, I inhibited the phosphorylation of a tyrosine-containing polypeptide substrate by epidermal growth factor receptor (EGFR) kinase, erbB2 kinase, and erbB4 kinase with IC50 values in the range of 0.001 μM - 10 μM. I also inhibited the proliferation of both human naso-pharyngeal carcinoma KB cells and non-neoplastic epithelial H16N-2 cells with IC50 values in the range 0.001 μM - 20 μM. In addition, I inhibited the growth of colorectal adenocarcinoma LoVo and human mammary carcinoma BT-474 tumor cell xenografts in vivo with activities in the range of 1 mg/kg/day to 200 mg/kg/day with no physiol. unacceptable toxicity at the ED.

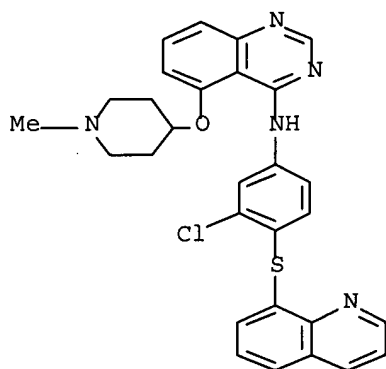
IT 524953-80-8P, 4-[3-Chloro-4-(8-quinolylthio)anilino]-5-(1-methylpiperidin-4-yloxy)quinazoline hydrochloride

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antitumor agent; preparation of quinazolines as erbB receptor tyrosine kinase inhibitors for treatment of cancer)

RN 524953-80-8 CAPLUS

CN 4-Quinazolinamine, N-[3-chloro-4-(8-quinolinylthio)phenyl]-5-[(1-methyl-4-piperidinyl)oxy]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:282325 CAPLUS Full-text

DOCUMENT NUMBER: 138:321285

TITLE: Preparation of quinazoline-2,4-diamines as MCH receptor antagonists

INVENTOR(S): Sekiguchi, Yoshinori; Kanuma, Kosuke; Omodera, Katsunori; Tran, Thuy-anh; Kramer, Bryan Aubrey; Beeley, Nigel Robert Arnold

PATENT ASSIGNEE(S): Taisho Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 1171 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003028641	A2	20030410	WO 2002-US31059	20020930
WO 2003028641	A3	20030828		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2001-326463P P 20011001

US 2001-326758P P 20011002

OTHER SOURCE(S): MARPAT 138:321285

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. QLYR1[Q = I, C(:NH)NH<sub>2</sub>; R<sub>1</sub> = (un)substituted alkyl, alkenyl, cycloalkyl, etc.; L = II-IV (wherein R<sub>4</sub> = H, alkyl; R<sub>5</sub> = H, alkyl, alkyl substituted by a substituted carbocyclic aryl), etc.; Y = SO<sub>2</sub>, CO, (CH<sub>2</sub>)<sub>m</sub>; m = 0-1] which act as MCH receptor antagonists, and are useful for prophylaxis or treatment of obesity, obesity related disorders, anxiety, or depression, were prepared Thus, hydrogenation of benzyl cis-[4-(4-dimethylaminoquinazolin-2-ylamino)cyclohexylmethyl]carbamate followed by reacting the resulting intermediate with 4-bromo-2- trifluoromethoxybenzaldehyde in the presence of NaBH(OAc)<sub>3</sub> and AcOH in CH<sub>2</sub>Cl<sub>2</sub>, and treatment of the product with 4N HCl in EtOAc afforded 34% cis-V.2HCl which showed IC<sub>50</sub> of 6 nM against MCH receptor.

IT 509145-49-7P 510741-66-9P 510743-46-1P  
510743-60-9P 510747-78-1P 510747-82-7P  
510749-77-6P 510749-83-4P

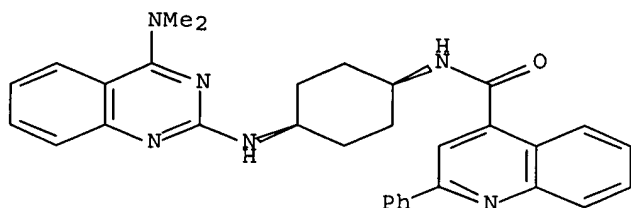
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinazoline-2,4-diamines as MCH receptor antagonists)

RN 509145-49-7 CAPLUS

CN 4-Quinolinecarboxamide, N-[cis-4-[[4-(dimethylamino)-2-quinazolinyl]amino]cyclohexyl]-2-phenyl- (9CI) (CA INDEX NAME)

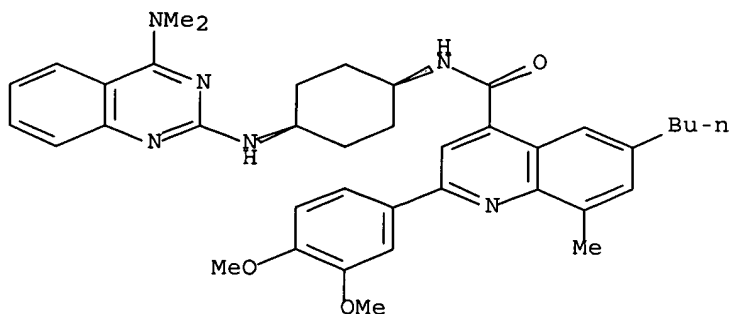
Relative stereochemistry.



RN 510741-66-9 CAPLUS

CN 4-Quinolinecarboxamide, 6-butyl-2-(3,4-dimethoxyphenyl)-N-[cis-4-[[4-(dimethylamino)-2-quinazolinyl]amino]cyclohexyl]-8-methyl- (9CI) (CA INDEX NAME)

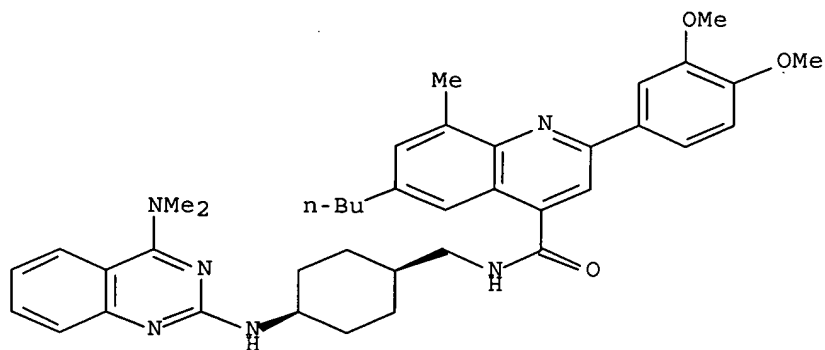
Relative stereochemistry.





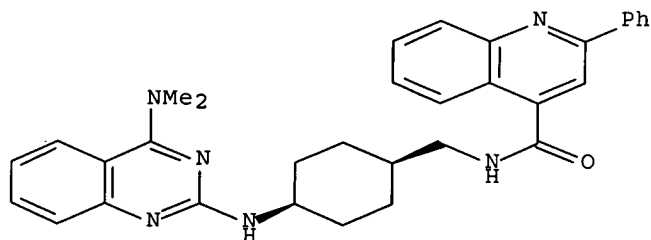
RN 510743-46-1 CAPLUS  
 CN 4-Quinolinecarboxamide, 6-butyl-2-(3,4-dimethoxyphenyl)-N-[[cis-4-[[4-(dimethylamino)-2-quinazolinyl]amino]cyclohexyl]methyl]-8-methyl- (9CI)  
 (CA INDEX NAME)

Relative stereochemistry.



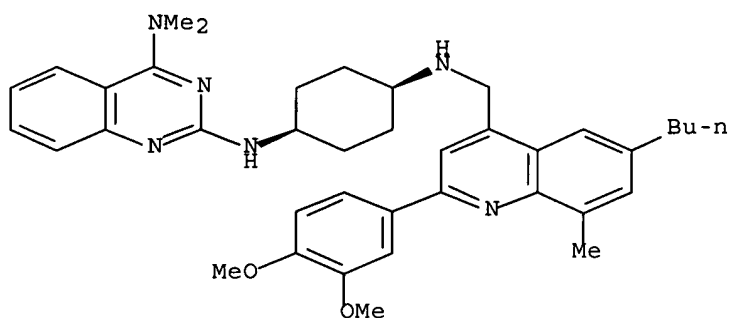
RN 510743-60-9 CAPLUS  
 CN 4-Quinolinecarboxamide, N-[[cis-4-[[4-(dimethylamino)-2-quinazolinyl]amino]cyclohexyl]methyl]-2-phenyl- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 510747-78-1 CAPLUS  
 CN 2,4-Quinazolinediamine, N2-[cis-4-[[[6-butyl-2-(3,4-dimethoxyphenyl)-8-methyl-4-quinolinyl]methyl]amino]cyclohexyl]-N4,N4-dimethyl- (9CI) (CA INDEX NAME)

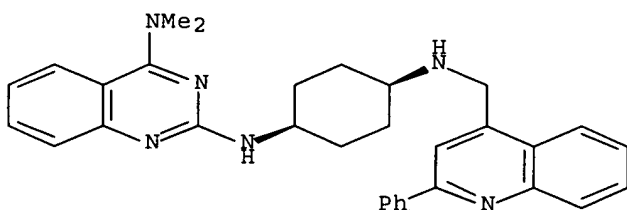
Relative stereochemistry.



RN 510747-82-7 CAPLUS

CN 2,4-Quinazolinediamine, N4,N4-dimethyl-N2-[cis-4-[[2-phenyl-4-quinolinyl)methyl]amino]cyclohexyl]- (9CI) (CA INDEX NAME)

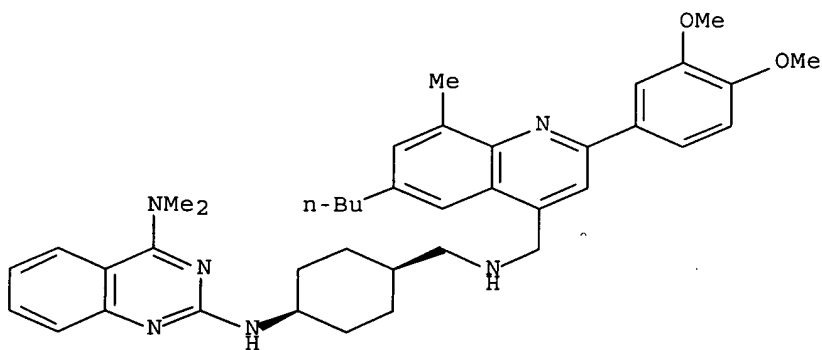
Relative stereochemistry.



RN 510749-77-6 CAPLUS

CN 2,4-Quinazolinediamine, N2-[cis-4-[[[6-butyl-2-(3,4-dimethoxyphenyl)-8-methyl-4-quinolinyl)methyl]amino]methyl]cyclohexyl]-N4,N4-dimethyl- (9CI) (CA INDEX NAME)

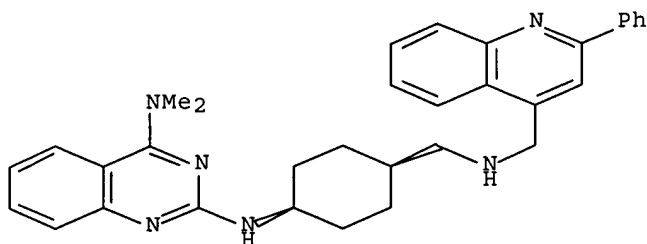
Relative stereochemistry.



RN 510749-83-4 CAPLUS

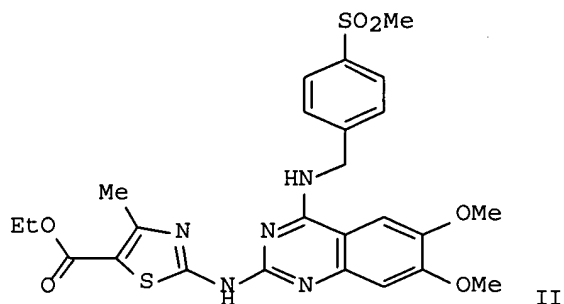
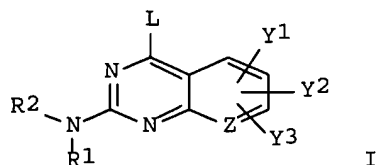
CN 2,4-Quinazolinediamine, N4,N4-dimethyl-N2-[cis-4-[[[2-phenyl-4-quinolinyl)methyl]amino]methyl]cyclohexyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L4 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:977603 CAPLUS Full-text  
DOCUMENT NUMBER: 138:55973  
TITLE: Preparation of quinazoline and pyrido[2,3-d]pyrimidine  
inhibitors of phosphodiesterase (PDE) 7  
INVENTOR(S): Pitts, William J.; Barbosa, Joseph  
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA  
SOURCE: PCT Int. Appl., 69 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 7  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002102315	A2	20021227	WO 2002-US19130	20020617
WO 2002102315	A3	20031120		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003092721	A1	20030515	US 2002-173322	20020617
US 2003100571	A1	20030529	US 2002-173530	20020617
PRIORITY APPLN. INFO.:			US 2001-299287P	P 20010619
			US 2002-368752P	P 20020329
OTHER SOURCE(S):		MARPAT 138:55973		
GI				



AB The title compds. [I; R1 = H, alkyl; R2 = heteroaryl, heterocyclyl, aryl fused to heteroaryl or heterocyclyl; L = haloalkyl, alkyl, aryl, etc.; Y1-Y3 = H, halo, alkyl, etc.; Z = N, CH], phosphodiesterase 7 (PDE 7) inhibitors useful in treating T-cell mediated diseases, were prepared Thus, reacting 2,4-dichloro-6,7-dimethoxyquinazoline with 4- methylsulfonylbenzylamine.HCl followed by palladium-catalyzed coupling of the intermediate with Et 2-amino-4-methylthiazole-5-carboxylate afforded II.

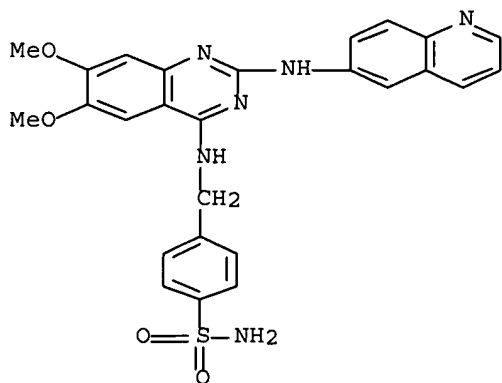
IT 479072-18-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinazoline and pyrido[2,3-d]pyrimidine inhibitors of phosphodiesterase (PDE) 7)

RN 479072-18-9 CAPLUS

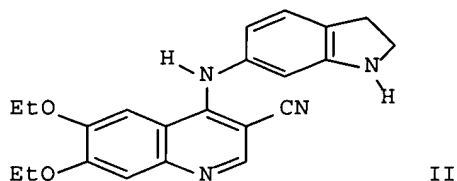
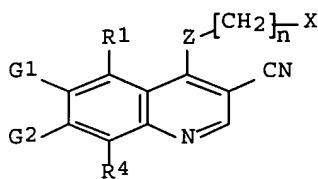
CN Benzenesulfonamide, 4-[[[6,7-dimethoxy-2-(6-quinolinylamino)-4-quinazolinyl]amino]methyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:672213 CAPLUS Full-text  
 DOCUMENT NUMBER: 135:226901  
 TITLE: Preparation of 3-cyanoquinolines as protein tyrosine kinase inhibitors  
 INVENTOR(S): Wissner, Allan; Tsou, Hwei-ru; Berger, Dan M.; Floyd, Middleton B., Jr.; Hamann, Philip R.; Zhang, Nan; Salvati, Mark E.; Frost, Philip  
 PATENT ASSIGNEE(S): American Cyanamid Company, USA  
 SOURCE: U.S., 68 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6288082	B1	20010911	US 1999-406573	19990924
PRIORITY APPLN. INFO.: US 1998-150693P			P	19980929
OTHER SOURCE(S):		MARPAT 135:226901		

GI

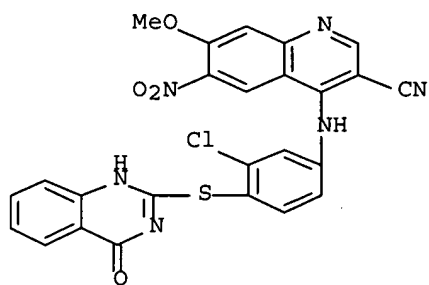


AB The title compds. [I; X = (un)substituted bicyclic aryl or bicyclic heteroaryl ring system of 8-12 atoms where the bicyclic heteroaryl ring contains 1-4 heteroatoms selected from N, O and S; Z = (un)substituted NH, O, S; G1, G2, R1, R4 = H, halo, alkyl, etc.; n = 0-1], useful as antineoplastic agents and in the treatment of polycystic kidney disease, were prepared Thus, Me 2-amino-4,5-diethoxybenzoate was N-condensed with HCNMe2/POCl3 and the product cyclocondensed with MeCN to give, after POCl3 treatment, 4-chloro-6,7-diethoxyquinoline-3-carbonitrile which was aminated by 6-aminoindoline to give title compd II. Data for biol. activity (inhibition of EGFR kinase, KDR, Eck, Mek-Erk) of I were given.

IT 263170-82-7P 263170-83-8P 263170-84-9P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 3-cyanoquinolines as protein tyrosine kinase inhibitors)

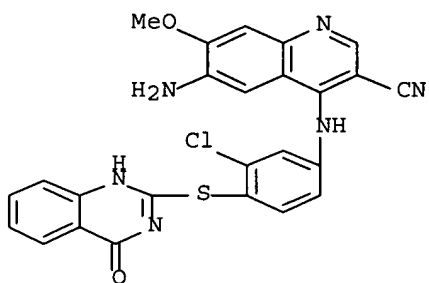
RN 263170-82-7 CAPLUS

CN 3-Quinolines carbonitrile, 4-[[3-chloro-4-[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]phenyl]amino]-7-methoxy-6-nitro- (9CI) (CA INDEX NAME)



RN 263170-83-8 CAPLUS

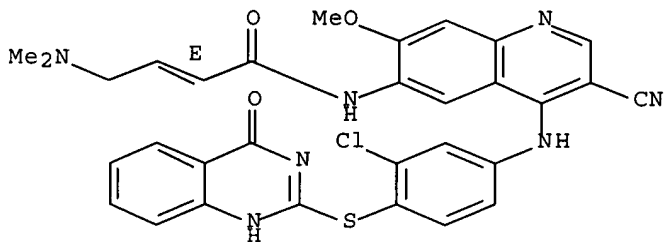
CN 3-Quinolinecarbonitrile, 6-amino-4-[[3-chloro-4-[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]phenyl]amino]-7-methoxy- (9CI) (CA INDEX NAME)



RN 263170-84-9 CAPLUS

CN 2-Butenamide, N-[4-[[3-chloro-4-[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]phenyl]amino]-3-cyano-7-methoxy-6-quinolinyl]-4-(dimethylamino)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2001:228866 CAPLUS Full-text

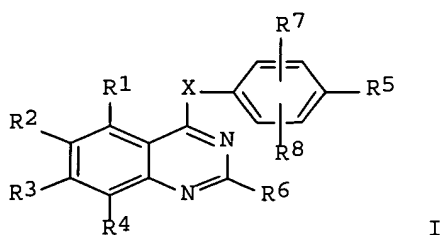
DOCUMENT NUMBER: 134:266317

TITLE: Preparation of quinazolines as aurora 2 kinase inhibitors

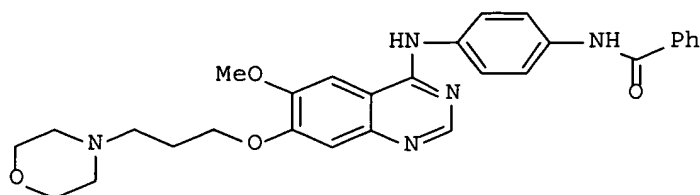
INVENTOR(S): Mortlock, Andrew Austen; Keen, Nicholas John; Jung, Frederic Henri; Brewster, Andrew George  
 PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited  
 SOURCE: PCT Int. Appl., 306 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021596	A1	20010329	WO 2000-GB3580	20000918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
BR 2000014116	A	20020521	BR 2000-14116	20000918
EP 1218354	A1	20020703	EP 2000-960840	20000918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003509499	T2	20030311	JP 2001-524975	20000918
EE 200200119	A	20030415	EE 2002-119	20000918
BG 106492	A	20030131	BG 2002-106492	20020307
NO 2002001399	A	20020430	NO 2002-1399	20020320
PRIORITY APPLN. INFO.:			GB 1999-22154	A 19990921
			GB 1999-22170	A 19990921
			WO 2000-GB3580	W 20000918

OTHER SOURCE(S): MARPAT 134:266317  
 GI



I



II

AB Title compds. (I) [wherein X = O, S, SO, SO2, NH, or NR12; R12 = H or alkyl; R1-R4 = independently halo, CN, NO2, alkylsulfanyl, N(OH)R13, or R15X1; R13 =

H or alkyl; X1 = a direct bond, O, CH<sub>2</sub>, OC(O), CO, CO<sub>2</sub>, S, SO, SO<sub>2</sub>, or (un)substituted NHCO, CONH, SO<sub>2</sub>NH, NHSO<sub>2</sub>, or NH; R15 = H or (un)substituted hydrocarbyl, heterocyclyl, or alkoxy; R5 = NHCO<sub>2</sub>R<sub>9</sub>, NHCOR<sub>9</sub>, NHSO<sub>2</sub>R<sub>9</sub>, COR<sub>9</sub>, CO<sub>2</sub>R<sub>9</sub>, SOR<sub>9</sub>, SO<sub>2</sub>OR<sub>9</sub>, CONR<sub>10</sub>R<sub>11</sub>, SONR<sub>10</sub>R<sub>11</sub>, or SO<sub>2</sub>NR<sub>10</sub>R<sub>11</sub>; R<sub>9</sub>-R<sub>11</sub> = independently H or (un)substituted hydrocarbyl or heterocyclyl; or R<sub>10</sub> and R<sub>11</sub> together with the N to which they are attached = (un)substituted heterocyclyl; R<sub>6</sub> = H or (un)substituted hydrocarbyl or heterocyclyl; R<sub>7</sub> and R<sub>8</sub> = independently H, halo, alkyl, (di)alkoxy(methyl), alkanoyl, CF<sub>3</sub>, CN, NHY<sub>2</sub>, alkenyl, alkynyl, or (un)substituted Ph, PhCH<sub>2</sub>, or heterocyclyl; or a salt, ester, or amide thereof] were prepared as aurora 2 kinase inhibitors for the treatment of proliferative diseases, such as cancer. For example, a 7-step sequence involving (1) alkylation of morpholine with 1-bromo-3-chloropropane (49%), (2) addition of Et vanillate to yield Et 3-methoxy-4-(3-morpholinopropoxy)benzoate (100%), (3) nitration (86%), (4) reduction to the amine using 10% Pd/C (100%), (5) cycloaddn. with formamide to form the quinazoline (68%), (6) chlorination to give 4-chloro-6-methoxy-7-(3-morpholinopropoxy)quinazoline (60%), and (7) amination with N-benzoyl-4-aminoaniline (58%) yielded II. The latter inhibited the serine/threonine kinase activity of aurora 2 kinase by 50% at a concentration of 0.0193 µM. In addition, II gave 50% inhibition of MCF-7 cell proliferation at 1.06 µM and reduced BrdU incorporation into cellular DNA by 50% at 0.159-0.209 µM.

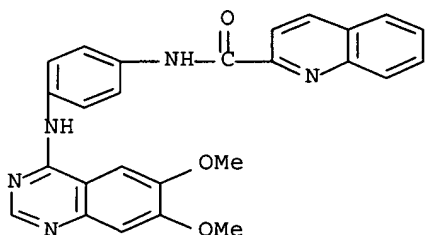
IT 331770-45-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 4-substituted quinazoline aurora 2 kinase inhibitors for treatment of cancer and other proliferative diseases)

RN 331770-45-7 CAPLUS

CN 2-Quinolinecarboxamide, N-[4-[(6,7-dimethoxy-4-quinazolinyl)amino]phenyl]-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2000:573671 CAPLUS Full-text

DOCUMENT NUMBER: 133:177183

TITLE: Preparation of quinazoline derivatives as angiogenesis inhibitors

INVENTOR(S): Hennequin, Laurent Francois Andre; Ple, Patrick; Stokes, Elaine Sophie Elizabeth; Mckerrecher, Darren

PATENT ASSIGNEE(S): Astrazeneca UK Limited, UK; Zeneca-Pharma S.A.

SOURCE: PCT Int. Appl., 346 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

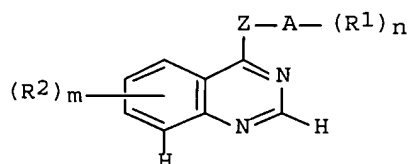
LANGUAGE: English



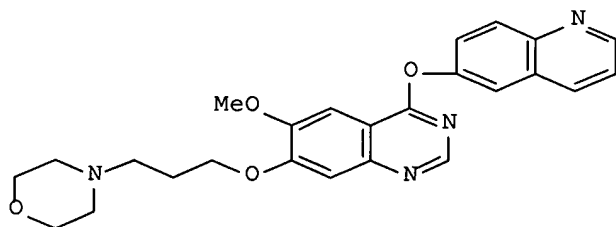
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000047212	A1	20000817	WO 2000-GB373	20000208
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1154774	A1	20011121	EP 2000-902730	20000208
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
BR 2000008128	A	20020213	BR 2000-8128	20000208
JP 2002536414	T2	20021029	JP 2000-598164	20000208
EE 200100409	A	20021216	EE 2001-409	20000208
AU 763618	B2	20030731	AU 2000-24475	20000208
ZA 2001006340	A	20021101	ZA 2001-6340	20010801
NO 2001003882	A	20011009	NO 2001-3882	20010809
PRIORITY APPLN. INFO.:			EP 1999-400305	A 19990210
			WO 2000-GB373	W 20000208
OTHER SOURCE(S):		MARPAT 133:177183		
GI				



I



II

AB The title compds. (I) [wherein A = an 8-, 9-, 10-, 12- or 13-membered bicyclic or tricyclic ring optionally containing 1-3 O, N, and/or S heteroatoms; Z = O, NH, S, CH<sub>2</sub>, or a bond; n = 0-5; m = 0-3; R<sub>2</sub> = H, OH, halo, CN, NO<sub>2</sub>, CF<sub>3</sub>, alkyl(sulfanyl), alkoxy, NR<sub>3</sub>N<sub>4</sub>, or R<sub>5</sub>X<sub>1</sub>; R<sub>3</sub> and R<sub>4</sub> = independently H or alkyl; X<sub>1</sub> = a bond, O, CH<sub>2</sub>, OC(O), CO, S, SO, SO<sub>2</sub>, NR<sub>6</sub>CO, CONR<sub>7</sub>, SO<sub>2</sub>R<sub>8</sub>, NR<sub>9</sub>SO<sub>2</sub>, or NR<sub>10</sub>; R<sub>5</sub> = H or (un)substituted alkyl, alkenyl, alkynyl, or heterocyclyl, etc.; R<sub>6</sub>-R<sub>10</sub> = independently H or (alkoxy)alkyl] were prepared for use in the production of an antiangiogenic and/or vascular permeability reducing effect in warm-blooded animals. For instance, II was synthesized in a 9-step

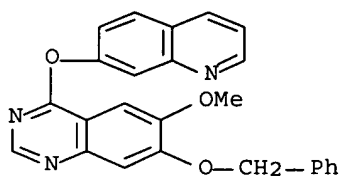
sequence starting with the cyclization of 2-amino-4-benzyloxy-5-methoxybenzamide using Gold's reagent in dioxane to form 7-benzyloxy-6-methoxy-3,4-dihydroquinazolin-4-one (84%). I and the pharmaceutically acceptable salts thereof inhibit the effects of VEGF, a property of value in the treatment of a number of disease states including cancer and rheumatoid arthritis (no data).

IT 288385-30-8P, 7-Benzyloxy-6-methoxy-4-(quinolin-7-yloxy)quinazoline

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(angiogenesis inhibitor; preparation of quinazolines as angiogenesis inhibitors by cyclization of 2-aminobenzamides and subsequent derivatization)

RN 288385-30-8 CAPLUS

CN Quinazoline, 6-methoxy-7-(phenylmethoxy)-4-(7-quinolinylloxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:227652 CAPLUS Full-text

DOCUMENT NUMBER: 132:265101

TITLE: Preparation of 3-cyanoquinolines as protein tyrosine kinase inhibitors

INVENTOR(S): Wissner, Allan; Tsou, Hwei-Ru; Berger, Dan Maarten; Floyd, Middleton Brawner, Jr.; Hamann, Philip Ross; Zhang, Nan; Salvati, Mark Ernest; Frost, Philip

PATENT ASSIGNEE(S): American Cyanamid Company, USA

SOURCE: PCT Int. Appl., 195 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000018761	A1	20000406	WO 1999-US22054	19990922
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2344169	AA	20000406	CA 1999-2344169	19990922
AU 9961593	A1	20000417	AU 1999-61593	19990922
AU 763669	B2	20030731		
EP 1117659	A1	20010725	EP 1999-948410	19990922
EP 1117659	B1	20031203		

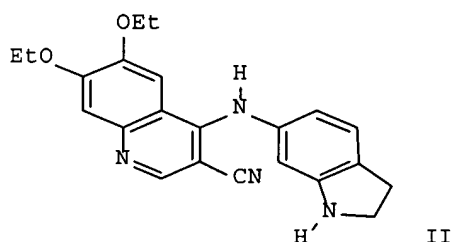
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

JP 2002525369	T2	20020813	JP 2000-572221	19990922
NZ 510551	A	20030328	NZ 1999-510551	19990922
NO 2001001575	A	20010528	NO 2001-1575	20010328
ZA 2001002729	A	20020703	ZA 2001-2729	20010403

PRIORITY APPLN. INFO.: US 1998-162802 A 19980929  
WO 1999-US22054 W 19990922

OTHER SOURCE(S): MARPAT 132:265101

GI

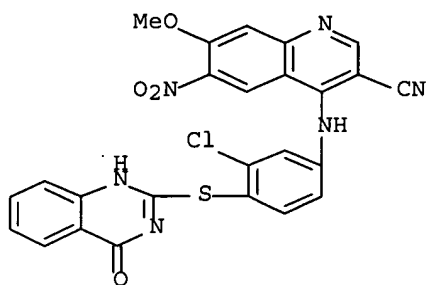


AB X(CH<sub>2</sub>)<sub>n</sub>ZZ1CN [I; X = (un)substituted bicyclic (hetero)aryl or LTA; A = (un)substituted phenylene, -pyridinediyl, -pyrimidinediyl; T = O, S, (alkyl)imino(alkylene), oxyalkylene, etc.; Z = O, S, (alkyl or alkanoyl)imino; Z1 = 2-unsubstituted-5,6,7,8-(un)substituted quinoline-4,3-diyl; n = 0 or 1] were prepared. Thus, Me 2-amino-4,5-diethoxybenzoate was N-condensed with HCNMe<sub>2</sub>/POCl<sub>3</sub> and the product cyclocondensed with MeCN to give, after POCl<sub>3</sub> treatment, 4-chloro-6,7-diethoxyquinoline-3-carbonitrile which was aminated by 6-aminoindoline to give title compd II. Data for biol. activity of I were given.

IT 263170-82-7P 263170-83-8P 263170-84-9P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of 3-cyanoquinolines as protein tyrosine kinase inhibitors)

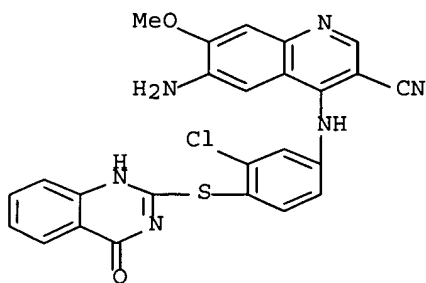
RN 263170-82-7 CAPLUS

CN 3-Quinolinecarbonitrile, 4-[[3-chloro-4-[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]phenyl]amino]-7-methoxy-6-nitro- (9CI) (CA INDEX NAME)



RN 263170-83-8 CAPLUS

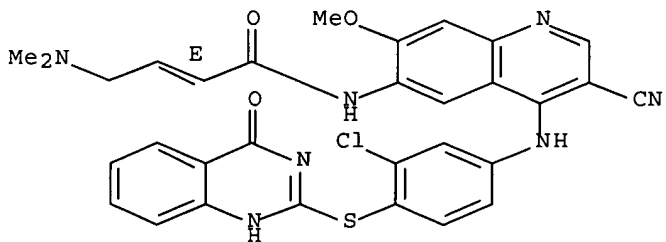
CN 3-Quinolinecarbonitrile, 6-amino-4-[[3-chloro-4-[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]phenyl]amino]-7-methoxy- (9CI) (CA INDEX NAME)



RN 263170-84-9 CAPLUS

CN 2-Butenamide, N-[4-[[3-chloro-4-[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]phenyl]amino]-3-cyano-7-methoxy-6-quinolinyl]-4-(dimethylamino)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:684278 CAPLUS Full-text

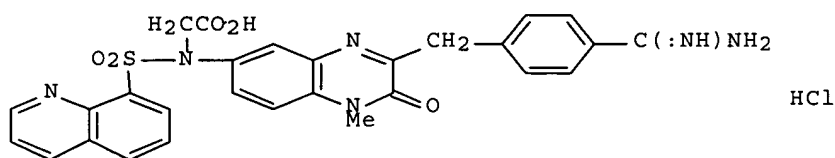
DOCUMENT NUMBER: 131:286541

TITLE: Bicyclic heterocyclic compds. for use as thrombin inhibitors

INVENTOR(S) : Ries, Uwe; Hael, Norbert; Priepke, Henning; Nar,  
Herbert; Stassen, Jean Marie; Wienen, Wolfgang  
PATENT ASSIGNEE(S) : Boehringer Ingelheim Pharma K.-G., Germany  
SOURCE: Ger. Offen., 62 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19816983	A1	19991021	DE 1998-19816983	19980417
US 6200976	B1	20010313	US 1999-280248	19990329
CA 2323606	AA	19991028	CA 1999-2323606	19990413
WO 9954313	A1	19991028	WO 1999-EP2464	19990413

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,  
RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
AU 9940303 A1 19991108 AU 1999-40303 19990413  
EP 1071669 A1 20010131 EP 1999-923410 19990413  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI  
JP 2002512234 T2 20020423 JP 2000-544652 19990413  
PRIORITY APPLN. INFO.: DE 1998-19816983 A 19980417  
US 1998-88175P P 19980605  
WO 1999-EP2464 W 19990413  
OTHER SOURCE(S) : MARPAT 131:286541  
GI



AB Heterocyclic compds. R-Het-A-Ar-R1 [A = O, S, CF<sub>2</sub>, CO, SO, SO<sub>2</sub>, NR<sub>2</sub> (R<sub>2</sub> = H, alkyl), carboxyalkyl, alkoxyalkylalkyl; Ar = phenylene, naphthylene, thienylene, thiazolylene, pyridinylene, pyrimidinylene, pyrazinylene, pyridazinylene which may be further substituted; Het = 1-alkyl-2-oxo-1,2-dihydrothieno[2,3-b]pyrazinylene, quinolinylene, isoquinolinylene, quinazolinylene, phthalazinylene, cinnolinylene, quinoxalinylene which may be further substituted or partially hydrated; R = H, F, Cl, Br, NO<sub>2</sub>, (un)substituted aliphatic, NH<sub>2</sub>, NHOH, Ph, tetrazolyl, imidazolyl, SO<sub>2</sub>Ph, cycloalkyl, cycloalkenyl; R<sub>1</sub> = CN, (un)substituted amindino] were prepared for use as thrombin inhibitors. Thus, the benzamidine I increased the aPTT time by 200% at 0.950 μM.

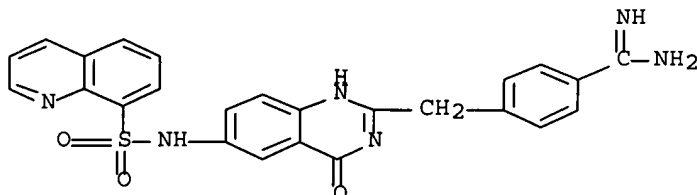
IT 246540-92-1P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of bicyclic heterocyclic compds. for use as thrombin inhibitors)

RN 246540-92-1 CAPLUS

CN Benzenecarboximidamide, 4-[[[1,4-dihydro-4-oxo-6-[(8-quinolinylsulfonyl)amino]-2-quinazolinyl]methyl]-, monohydrochloride (9CI)  
(CA INDEX NAME)



⊙ HCl

L4 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:169450 CAPLUS Full-text

DOCUMENT NUMBER: 126:264070

TITLE: Synthesis of 2-substituted 4-quinazalone-5-carboxylic acids as inhibitors of DNA-gyrase

AUTHOR(S): Sui, Zhihua; Nguyen, Van N.; Fernandez, Jeff; Barrett, John F.; Ohemeng, Kwasi A.

CORPORATE SOURCE: Drug Discovery, R. W. Johnson Pharmaceutical Research Institute, Raritan, NJ, 08869, USA

SOURCE: Journal of Heterocyclic Chemistry (1997), 34(1), 153-156

CODEN: JHTCAD; ISSN: 0022-152X

PUBLISHER: HeteroCorporation

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of 4-quinazalone-5-carboxylic acids were designed as bacterial DNA gyrase inhibitors. The syntheses of the target compds. were accomplished by reacting 3-aminophthalimide with aroyl chlorides followed by rearrangement of the resulting 3-acylaminophthalimides under basic conditions. The designed compds. showed moderate DNA gyrase inhibitory activity.

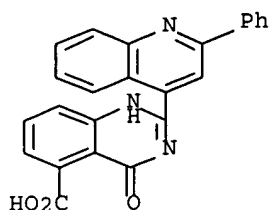
IT 188690-26-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(synthesis of 2-substituted 4-quinazalone-5-carboxylic acids as inhibitors of DNA-gyrase)

RN 188690-26-8 CAPLUS

CN 5-Quinazolinecarboxylic acid, 1,4-dihydro-4-oxo-2-(2-phenyl-4-quinolinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:304564 CAPLUS Full-text

DOCUMENT NUMBER: 125:58435

TITLE: Synthesis and biological activities of some new heterocyclic compounds bearing 2-phenyl-6-iodoquinazolinyl-4-oxy moiety. Part I

AUTHOR(S): Abdel-Hamide, S. G.; El-Hakim, A.E.; Abdel-Rahman, R.M.

CORPORATE SOURCE: Faculty of Pharmacy, Al-Azhar University, Nasr, Egypt  
SOURCE: Indian Journal of Heterocyclic Chemistry (1996), 5(3), 219-222

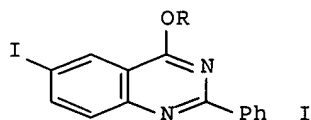
CODEN: IJCHEI; ISSN: 0971-1627

PUBLISHER: Lucknow University, Dep. of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



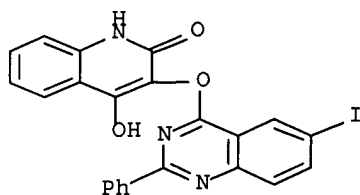
AB New heterocyclics with a 2-phenyl-6-iodoquinazolinyl-4-oxy moiety e.g. I (R = CH<sub>2</sub>CONHNH<sub>2</sub>, 2-amino-1,3,4-thiadiazol-5-ylmethyl, 2,4-dihydroxy-3-quinolinyl, 3-mercapto-1H-1,2,4-triazol-5-ylmethyl) have been prepared from the reactions of 4-carboethoxymethyloxy-2-phenyl-6-iodoquinazoline with various nitrogen compds. followed by cyclization reactions. Some of these new heterocyclics have been tested for their bactericidal activities.

IT 178206-35-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of new 2-phenyl-6-iodoquinazolinyl-4-oxy heterocyclics)

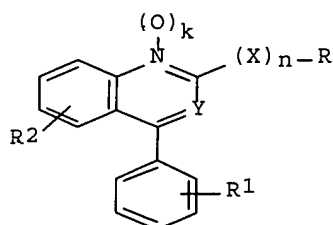
RN 178206-35-4 CAPLUS

CN 2(1H)-Quinolinone, 4-hydroxy-3-[(6-iodo-2-phenyl-4-quinazolinyl)oxy]-(9CI) (CA INDEX NAME)

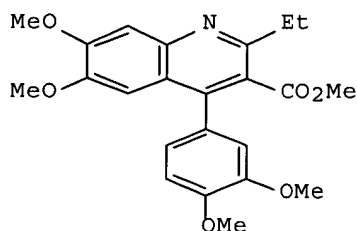


L4 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1995:410651 CAPLUS Full-text  
 DOCUMENT NUMBER: 122:187610  
 TITLE: Preparation of 4-phenylquinolines and  
 4-phenylquinazoline as bone resorption inhibitors  
 INVENTOR(S): Sohda, Takashi; Taketomi, Shigehisa; Baba, Atsuo  
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 85 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 634169	A1	19950118	EP 1994-109861	19940625
EP 634169	B1	20000105		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AT 188377	E	20000115	AT 1994-109861	19940625
CA 2126966	AA	19941230	CA 1994-2126966	19940628
JP 07069890	A2	19950314	JP 1994-146045	19940628
US 5719157	A	19980217	US 1996-756189	19961125
US 5852039	A	19981222	US 1997-783079	19970115
PRIORITY APPLN. INFO.:			JP 1993-158652	19930629
			US 1994-265793	19940627
			US 1996-756189	19961125
OTHER SOURCE(S):		MARPAT 122:187610		
GI				



I



II

AB The title compds., 4-phenylquinolines, 4-phenylquinazolines, 4-phenylquinoline 1-oxides and 4-phenylquinazoline 1-oxides I (R = alkyl, heterocyclic group, etc.; R1, R2 = H, alkyl, etc.; n,k = 0,1; Y = nitrogen, methine) were



disclosed as pharmaceuticals for preventing or treating osteoporosis and inhibiting bone resorption. A specifically claimed example compound was Me 4-(3,4-dimethoxyphenyl)-2-ethyl-6,7-dimethoxy-3-quinolinecarboxylate (II).

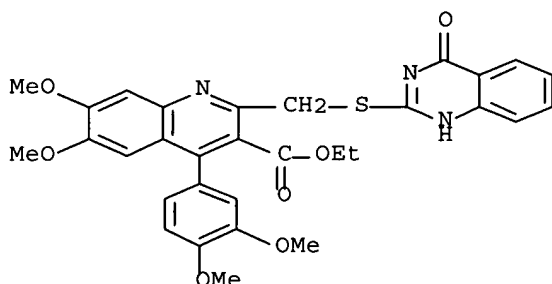
IT 153395-35-8P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (phenyl)quinolines or (phenyl)quinazolines bone resorption inhibitors)

RN 153395-35-8 CAPLUS

CN 3-Quinolinecarboxylic acid, 2-[[[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]methyl]-4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:655818 CAPLUS Full-text

DOCUMENT NUMBER: 121:255818

TITLE: Pharmaceutical composition containing quinoline and quinazoline derivatives and novel compounds therefor

INVENTOR(S): Sohda, Takashi; Makino, Haruhiko; Baba, Atsuo

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Can. Pat. Appl., 99 pp.

CODEN: CPXXEB

DOCUMENT TYPE: Patent

LANGUAGE: English

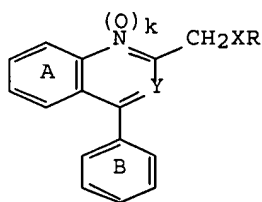
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2094774	AA	19931025	CA 1993-2094774	19930423
JP 09169734	A2	19970630	JP 1997-11420	19930422
CN 1223115	A	19990721	CN 1998-109507	19980529
PRIORITY APPLN. INFO.:			JP 1992-106424	A 19920424
			JP 1992-121887	A 19920514
			JP 1992-285865	A 19921023
			JP 1992-37952	A 19930226
			JP 1993-37952	A 19930226
			JP 1993-95780	A3 19930422

OTHER SOURCE(S): MARPAT 121:255818

GI



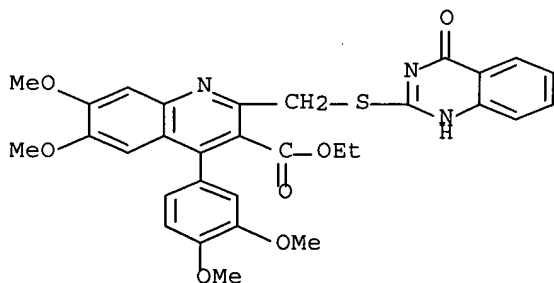
I

AB Quinolines and quinazolines I [Y = N, C-G (G is carboxyl which may be esterified); X = optionally oxidized S, O, alkylene; R = optionally substituted hydrocarbon or heterocyclic group; A and B rings may optionally have at least one substituent; k = 0, 1] were prepared and are antiinflammatory agent (test data given). Thus, treating Et 2-chloromethyl-6-7-dimethoxy-4-(3,4-dimethoxyphenyl)quinoline-3- carboxylate with 1-ethyl-2-mercaptoimidazole gave 78% Et 2-[(1-ethylimidazol-2-yl)thiomethyl]-6-7-dimethoxy-4-(3,4- dimethoxyphenyl)quinoline-3-carboxylate.

IT 153395-35-8P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as antiinflammatory agents)

RN 153395-35-8 CAPLUS

CN 3-Quinolinecarboxylic acid, 2-[[[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]methyl]-4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:217712 CAPLUS Full-text

DOCUMENT NUMBER: 120:217712

TITLE: Quinoline- and quinazoline-derivative antiarthritics and analgesics

INVENTOR(S): Sohda, Takashi; Makino, Haruhiko; Baba, Atsuo

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: Eur. Pat. Appl., 48 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent

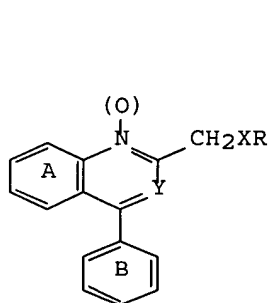
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

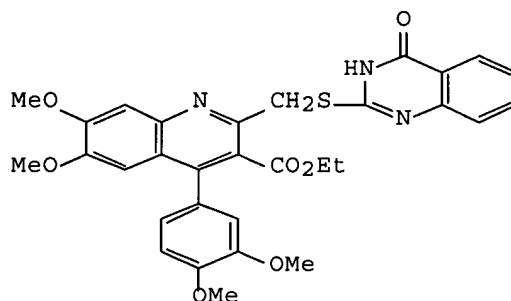
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 567107	A1	19931027	EP 1993-106521	19930422
EP 567107	B1	20011121		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AU 9336991	A1	19931028	AU 1993-36991	19930416
AU 656069	B2	19950119		
US 5948782	A	19990907	US 1993-49500	19930421
NO 9301482	A	19931025	NO 1993-1482	19930422
JP 06306052	A2	19941101	JP 1993-95780	19930422
JP 2648434	B2	19970827		
JP 09169734	A2	19970630	JP 1997-11420	19930422
AT 209199	E	20011215	AT 1993-106521	19930422
HU 64322	A2	19931228	HU 1993-1197	19930423
RU 2130934	C1	19990527	RU 1993-4926	19930423
CN 1079222	A	19931208	CN 1993-104980	19930424
CN 1223115	A	19990721	CN 1998-109507	19980529
PRIORITY APPLN. INFO.:			JP 1992-106424	A 19920424
			JP 1992-121887	A 19920514
			JP 1992-285865	A 19921023
			JP 1993-37952	A 19930226
			JP 1993-95780	A3 19930422
OTHER SOURCE(S):			MARPAT 120:217712	
GI				



I



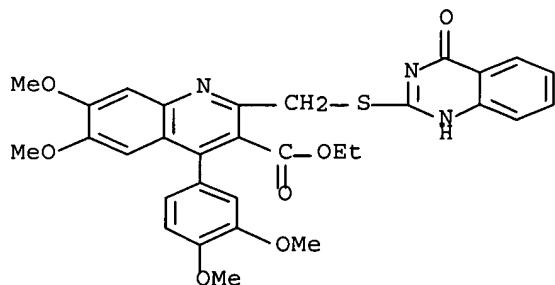
II

AB The title compds. I [ring A and B may optionally have  $\geq 1$  substituent; R = (un)substituted hydrocarbon group, (un)substituted heterocyclic group having a ring-constituting C atom attached to X; X = optionally oxidized S atom, O, (CH<sub>2</sub>)<sub>q</sub>; q = 1-5; Y = N, CG; G = carboxyl which may be esterified; k = 0, 1], useful as antiinflammatory agents and analgesics in the treatment of arthritis, are prepared. Thus, quinazoline derivative II (m.p. 183-184°) was prepared in 81% yield and demonstrated 36% swelling inhibitory rate when administered in a 50 mg/kg dosage in the rat carrageenin paw edema-inhibitory activity test.

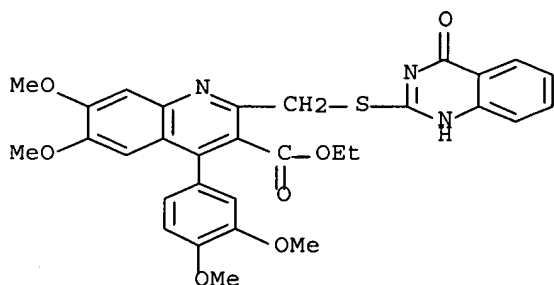
IT 153395-35-8  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
 (antiarthritic and analgesic activity of)

RN 153395-35-8 CAPLUS

CN 3-Quinolinecarboxylic acid, 2-[[[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]methyl]-4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-, ethyl ester (9CI) (CA INDEX NAME)



IT 153395-35-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and antiarthritic and analgesic activity of)  
 RN 153395-35-8 CAPLUS  
 CN 3-Quinolinecarboxylic acid, 2-[[[(1,4-dihydro-4-oxo-2-quinazolinyl)thio]methyl]-4-(3,4-dimethoxyphenyl)-6,7-dimethoxy-, ethyl ester (9CI) (CA INDEX NAME)

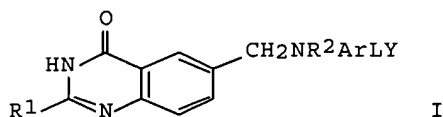


L4 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1991:23978 CAPLUS Full-text  
 DOCUMENT NUMBER: 114:23978  
 TITLE: Preparation of quinazolinone derivatives as anti-tumor agents  
 INVENTOR(S): Hughes, Leslie Richard; Oldfield, John; Pegg, Stephen John; Barker, Andrew John; Marsham, Peter Robert  
 PATENT ASSIGNEE(S): Imperial Chemical Industries PLC, UK; National Research Development Corp.  
 SOURCE: Eur. Pat. Appl., 65 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 373891	A2	19900620	EP 1989-312986	19891212
EP 373891	A3	19901205		
EP 373891	B1	19941102		

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

NO 8904692	A	19900618	NO 1989-4692	19891124
AU 8945883	A1	19900621	AU 1989-45883	19891204
ZA 8909481	A	19900829	ZA 1989-9481	19891212
ES 2063830	T3	19950116	ES 1989-312986	19891212
GB 2227016	A1	19900718	GB 1989-28146	19891213
GB 2227016	B2	19920715		
CA 2005476	AA	19900615	CA 1989-2005476	19891214
US 5089499	A	19920218	US 1989-450670	19891214
DK 8906366	A	19900616	DK 1989-6366	19891215
JP 02218668	A2	19900831	JP 1989-324135	19891215
US 5252573	A	19931012	US 1991-793183	19911118
US 5395838	A	19950307	US 1993-91828	19930713
PRIORITY APPLN. INFO.:			GB 1988-29296	A 19881215
			US 1989-450670	A3 19891214
			US 1991-793183	A3 19911118
OTHER SOURCE(S):		MARPAT 114:23978		
GI				

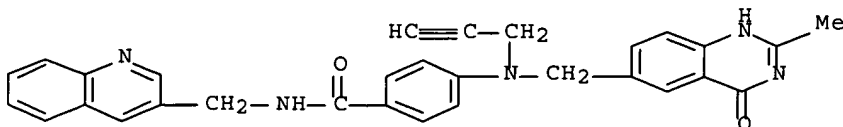


AB Title compds. I (R4 = H, H2N, C1-6 alkyl, C1-6 alkoxy, substituted C1-3 alkyl, C1-3 hydroxyalkoxy, C1-6 alkoxyalkoxy; R2 = H, C1-6 alkyl, -alkenyl, -alkynyl, -hydroxyalkyl, -haloalkyl, -cyanoalkyl; Ar = (substituted) phenylene, -heterocyclene; L = CONH, NHCO, CH:CH, etc.; Y = C1-10 aryl, -hydrogenated aryl, -heteroaryl, etc.) or a pharmaceutically-acceptable salt thereof, are prepared (PhO)2PON3 and Et3N were added successively to a mixture of p-[N-(3,4-dihydro-2-methyl-4-oxoquinazolin-6-methyl)-N-prop-2-ynylamino]benzoic acid-trifluoroacetic acid salt and DMSO. The mixture was stirred for 5 h followed by 3-(aminomethyl)pyridine to give I (R1 = H; R2 = HC.tplbond.CCH2; ArL = C6H4CO; Y = 3-pyridylmethyl). Similarly prepared was I (R1 = Me; R2 = HC.tplbond.CCH2, L = NHCO; Y = 2-pyridylmethyl) (II). II showed an IC50 of 3.9  $\mu$ M against L1210 cell line. Pharmaceutical formulations comprising I are given.

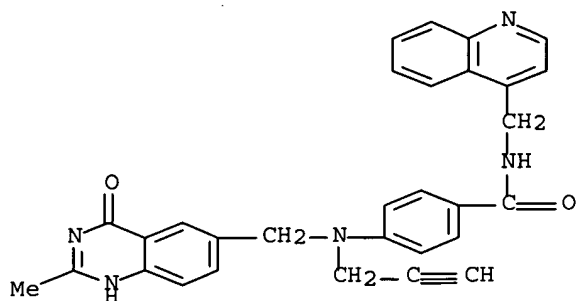
IT 131051-76-8P 131051-77-9P 131051-78-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of, as antitumor agent)

RN 131051-76-8 CAPLUS

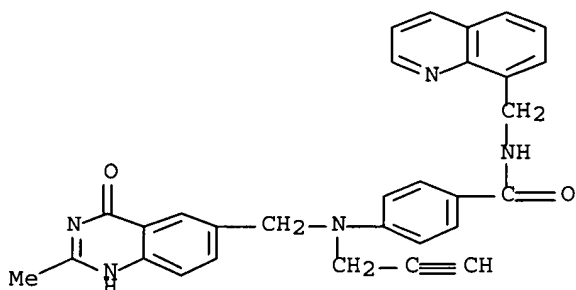
CN Benzamide, 4-[[[(1,4-dihydro-2-methyl-4-oxo-6-quinazolinyl)methyl]-2-propynylamino]-N-(3-quinolinylmethyl)- (9CI) (CA INDEX NAME)



RN 131051-77-9 CAPLUS  
 CN Benzamide, 4-[[[(1,4-dihydro-2-methyl-4-oxo-6-quinazolinyl)methyl]-2-propynylamino]-N-(4-quinolinylmethyl)- (9CI) (CA INDEX NAME)



RN 131051-78-0 CAPLUS  
 CN Benzamide, 4-[[[(1,4-dihydro-2-methyl-4-oxo-6-quinazolinyl)methyl]-2-propynylamino]-N-(8-quinolinylmethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1970:414765 CAPLUS Full-text  
 DOCUMENT NUMBER: 73:14765  
 TITLE: Reactions with imido esters. XIII. Preparation of fluorescent nitriles and imido esters. Possible application as indicators in peptide chemistry  
 AUTHOR(S): Ried, Walter; Piechaczek, Detlef; Vollberg, Erhard  
 CORPORATE SOURCE: Inst. Org. Chem., Univ. Frankfurt, Frankfurt  
 SOURCE: Justus Liebig's Annalen der Chemie (1970), 734, 13-22  
 CODEN: JLACBF; ISSN: 0075-4617  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 OTHER SOURCE(S): CASREACT 73:14765  
 GI For diagram(s), see printed CA Issue.  
 AB Condensation of p-NCC6H4CHO with 2-methylbenzoxazoles (I) (X = O), - benzothiazoles (I) (X = S), or -benzimidazoles (I) (X = NH) (where R = H, Cl, or Me; and R1 = H or Me) gave 14-91% 2-[2-(p-cyanophenyl)vinyl]benzoxazoles

(II) (X = O), -benzothiazoles (II) (X = S), or -benzimidazoles (II) (X = NH). Similar condensation of 2-methylquinolines (III) (where R = H or Me, R1 = H or Me, and R2 = H or Me) gave 19-50% 2-[2-(p-cyanophenyl)vinyl]quinolines (IV). II (where R = R1 = H) were converted in 12-65% yield into 2-[2-[p-[R2C(:NH)-substituted]phenyl]vinyl]benzoxazoles (V) (X = O), -benzothiazoles (V) (X = S), or -benzimidazoles (V) (X = NH) (where R2 = OEt or OCH2CH2OMe). Similarly, IV (where R = R1 = R2 = H or Me) were transformed in 12-18% yield into 2-methoxyethyl-p-[2-(2-quinolyl)vinyl]benzimidates (VI). The fluorescent imidates V and VI were proposed for labeling proteins.

IT 27051-14-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 27051-14-5 CAPLUS

CN 4(1H)-Quinazolinone, 2-[p-[2-(2-quinolyl)vinyl]phenyl]- (8CI) (CA INDEX NAME)

